PERSPECTIVES IN PSYCHOLOGICAL SCIENCE

A Three-Day Unit Lesson Plan for High School Psychology Teachers

Kenneth D. Keith, PhD
University of San Diego

Adapted and expanded from previous work by Fred Connington, Randal M. Ernst, Nancy Fenton, Steve Jones, and Jeff Norby

Developed and produced by the Teachers of Psychology in Secondary Schools (TOPSS) of the American Psychological Association, July 2014.

SHOUT
SHARE
IT

PERSPECTIVES IN PSYCHOLOGICAL SCIENCE

A Three-Day Unit Lesson Plan for High School Psychology Teachers

This unit is aligned to the following content and performance standards of the *National Standards for High School Psychology Curricula* (APA, 2011):

DOMAIN: SCIENTIFIC INQUIRY

STANDARD AREA: PERSPECTIVES IN PSYCHOLOGICAL SCIENCE

CONTENT STANDARDS

After concluding this unit, students understand:
1. Development of psychology as an empirical science
2. Major subfields within psychology

CONTENT STANDARDS WITH PERFORMANCE STANDARDS

CONTENT STANDARD 1: Development of psychology as an empirical science

Students are able to:
1.1 Define psychology as a discipline and identify its goals as a science
1.2 Describe the emergence of psychology as a scientific discipline
1.3 Describe perspectives employed to understand behavior and mental processes
1.4 Explain how psychology evolved as a scientific discipline

CONTENT STANDARD 2: Major subfields within psychology

Students are able to:
2.1 Discuss the value of both basic and applied psychological research with human and nonhuman animals
2.2 Describe the major subfields of psychology
2.3 Identify the important role psychology plays in benefiting society and improving people's lives

An earlier draft of this lesson plan had been supported by a grant from the American Psychological Foundation. TOPSS thanks John Norcross, PhD, of the University of Scranton and Jyh-Hann Chang, PhD, of East Stroudsburg University for their reviews of this unit plan.

Copyright (C) 2014 American Psychological Association.

CONTENTS

INTRODUCTION	V
PROCEDURAL TIMELINE	1
CONTENT OUTLINE	3
ACTIVITIES	21
CRITICAL THINKING AND DISCUSSION QUESTIONS	39
RESOURCES, REFERENCES, AND RECOMMENDED READING	41
APPENDIX: ADDITIONAL KEY HISTORICAL FIGURES FOR UNIT LESSON PLAN	47

INTRODUCTION

Students come to their first psychology course with a variety of assumptions and expectations, many of them based on misconceptions and misunderstanding. Thus, students may not be aware of the distinctions between psychology and psychiatry, or they may assume that all of psychological science is devoted to treatment and care of people with personal problems. In this unit you will introduce students to a broader view of the field, encompassing not only the practices they may expect to learn, but also the wide array of additional applications in industry, biology, medicine, and more. Furthermore, you will acquaint students with the scientific foundations of psychology and psychologists' interest in the behavior of both human and nonhuman subjects.

German psychologist Hermann Ebbinghaus (1908) famously observed that "psychology has a long past, yet its real history is short" (p. 1). As long as there have been people, they have been interested in the nature and causes of behavior, and for centuries philosophers and scientists have studied behavior; yet psychology as a distinct discipline came into existence only within the past 150 years. The story of psychological perspectives is the story of the evolution of psychological science from its roots in philosophy and biology to the variety of viewpoints and specialties that we recognize today.

Although the *National Standards for High School Psychology Curricula* does not explicitly mention history of psychology, some knowledge of the history of the field is necessary for an understanding of the emergence of psychology as a scientific discipline. This history includes the backdrop provided by the early Greek philosophers and physicians, moves through the Middle Ages to the Renaissance era, gathers momentum during the Age of Enlightenment, and brings forth the science of psychology in the laboratories of late 19th-century Europe and North America. The history of psychological science culminates in the diverse subfields that characterize the work of contemporary psychologists, both researchers and practitioners.

Some teachers of psychology prefer to teach the history and evolution of the field through the lives and work of the key figures who shaped the field. Others adopt an approach based on the cultural backdrop or spirit of the times (the zeitgeist) as a determinant of psychological viewpoints. Perhaps the most effective strategy lies in the recognition that powerful people are both the product of their times and the shapers of their times—suggesting an ongoing reciprocal process that leads naturally to changing points of view and an evolving science that continues to reflect the people and places from which it arises.

Thus, psychological perspectives are likely to seem more sensible and understandable to students who know something about the lives of the people who have shaped those perspectives. And the people are more likely to come alive in the minds of students who can appreciate the politics, religion, and scientific knowledge of the times in which those scientists and theorists existed.

This unit contains three suggested lessons: Evolution of Psychological Science, Psychological Perspectives, and Subfields of Psychological Science and Practice. In addition, this unit contains a section with brief notes on additional key people; a section with suggested teaching activities; and a section with resources, references, and suggested readings. Although the material is organized into three suggested lessons, you could certainly spend more time on the perspectives and history of the field, especially if you make use of some of the more extensive ideas for activities.

PROCEDURAL TIMELINE

LESSON 1: EVOLUTION OF PSYCHOLOGICAL SCIENCE

Activity 1.1: Activities From the Society for the History of Psychology Website

Activity 1.2: Facebook Activity

Activity 1.3: Psychology Goes to Madison Avenue

LESSON 2: PSYCHOLOGICAL PERSPECTIVES

Activity 2: Using Psychological Perspectives to Answer Questions on Behavior

LESSON 3: SUBFIELDS OF PSYCHOLOGICAL SCIENCE AND PRACTICE

CONTENT OUTLINE

LESSON 1

Evolution of Psychological Science

In this lesson you will trace the development of ideas about behavior from the early Greek philosophers to contemporary scientists.

I. Defining psychological science

A. Scholars interested in philosophy, physiology, and psychology have long studied subject matters that today we might consider psychological science: mind, thought, consciousness, learning, memory, and behavior, among others.

B. These various interests have encompassed not only the observable outward activities that we call behavior, but a wide range of internal events that we now consider mental processes. Thus, today we define psychology as ***the science of behavior and mental processes.***

C. Under the umbrella of this definition, psychologists have two major goals:

1. Psychological scientists **conduct research to create and disseminate knowledge** in broad areas of behavior, both human and nonhuman. Scientists conduct basic research in order to improve understanding of behavioral and mental processes in their own right.

2. Psychologists work to improve the lives of people by **applying the findings of psychological science** to a wide range of real-world problems and settings. These include diagnosis

and treatment of mental illness, vocational and educational counseling, improvement of physical health, development of social policy, applications to law, and increased effectiveness of management, among many others.

3. Thus, the aims of psychological science as a discipline reflect the goals listed above: Psychological science contributes to the scientific understanding of behavior and mental processes by describing, explaining, and predicting behavior through the scientific method. The outcomes of psychological science aim to benefit society and improve people's lives.

II. Prescientific psychology

A. The Greeks: Socrates (469-399 BCE), **Hippocrates** (460-377 BCE), **Plato** (429-347 BCE), and **Aristotle** (384-322 BCE)

1. Interested in topics that remain important today, e.g., learning, memory, brain function, dreaming

2. Examples:

   a. Aristotle wrote *De Anima* ("On the Mind") and discussed mental states.

   b. Hippocrates, a central historical figure in medicine, saw the brain as home of intellect, consciousness, thinking, and behavior.

   c. The Greeks tried to explain empirical phenomena (things they observed) and to set science free from religion and supernatural explanations.

   d. The Greeks gave us the word psyche ("soul" or "mind").

   e. The Greek approach was philosophical (not experimental), although Socrates used a kind of questioning inquiry that predates scientific method.

3. Terms

   a. **Monism:** the belief that the mind (soul) and body are in fact different aspects of the same thing (Aristotle, Locke)

   b. **Dualism:** the belief that the mind (soul) can exist separately from the body (Socrates, Plato, St. Thomas Aquinas, Rene Descartes)

B. **The Middle Ages**—often called the Dark Ages, despite some important advances in science and technology

1. Examples of advances: Printing press, gunpowder, windmills, clocks, universities (Paris, Bologna, Oxford, Cambridge, among others)

2. Scientific assumptions were largely untested due to lack of methods and enthusiasm for challenging religious views.

3. **St. Thomas Aquinas** (1225-1274) argued for separation of body and soul, reflecting the mind–body dualism we still discuss today.

C. **Renaissance**—Europe gradually began to change, with significant developments in art and literature and Gutenberg's invention of movable type (c. 1450).

1. Science was slower to develop, in part because of the fear of conflict with religion.

2. In England, however, **Francis Bacon** (1561-1626) argued for a new science based on the belief that people could understand the natural world via observation and experimentation.

D. **The Enlightenment**—an era in which philosophers assumed rational thought to be the highest human aim, and reason and science the only certain paths to illuminating the darkness of ignorance

1. The French mathematician and philosopher **René Descartes** (1596-1650), like Aquinas, put forth a dualistic mind–body model.

    a. For Descartes, the dualism reflected a reflexive, mechanistic physical system and a nonmaterial mind that encompassed consciousness and thought.

    b. Descartes believed the mind controlled certain reflexes and that mind–body interaction was controlled in the brain by the pineal gland.

    c. Descartes also thought some kinds of ideas and knowledge were innate (inborn), including ideas about geometry, self, God, and time and space.

2. The empiricists

    a. English philosopher **Thomas Hobbes** (1588-1679) disagreed with his friend Descartes' theory of innate ideas. Instead, Hobbes believed that ideas arose from sensory experience, an idea that also found support in the work of another Englishman, **John Locke** (1632-1704).

    b. Like Aristotle before him, Locke saw the mind as a blank page—to be written upon by experience. Locke's "blank slate" was what Aristotle had called the tabula rasa. Ideas, then, came via sensory experience. Locke also recognized that memory of sensory experiences allowed development of ideas independently of immediate sensations.

    c. In letters to his cousin, Locke gave childrearing advice based on his notion of environmental experience as the foundation of learning.

3. Associationism

    a. Scottish philosopher **David Hume** (1711-1776) in his *An Enquiry Concerning Human Understanding* (1748) put forth his ideas for a science of human nature.

    b. Hume extended the ideas of the empiricists in his attempt to account for how we make associations between sensory experiences and ideas. Ideas can become associated, or related, he believed, in three ways: They may be similar; they may be contiguous (close together in time and place); or they may have a cause-and-effect relation to one another.

    c. Hume recognized that association (which today we call correlation) alone does not prove causation—a fact that is still acknowledged by modern-day psychological scientists.

    d. **David Hartley** (1705-1757), an English philosopher, extended Hume's notion of association to include the possibility that associations between sensations and ideas could allow the brain to produce an image of the stimulus (describing such phenomena as the afterimage we see after viewing a bright light). Hartley also extended the idea of association to the learning of complex motor skills (which he saw as the association of simpler motor habits).

    e. **John Stuart Mill** (1773-1836) further extended the asso-

ciationist perspective using the metaphor of a brick-and-mortar wall. Combining (associating) brick and mortar, he reasoned, creates a wall with new characteristics different from its components—resulting in the idea that the whole may be greater than the sum of its parts. [This idea would be echoed later in the work of the Gestalt psychologists and their work in the area of perception. This group included **Max Wertheimer** (1880-1943), **Kurt Koffka** (1886-1941), and **Wolfgang Köhler** (1887-1967). Gestalt (German for "whole") psychologists emphasized that in perception, individuals tend to integrate individual pieces of information into meaningful wholes.] Mill also advocated for a psychology based on the methods of observation and experiment.

III. Psychological science—foundations

A. Understanding the nervous system

1. **Johannes Müller** (1801-1858), a German physician and scientist, published (1826) the idea that sensory nerves carried a single type of information (optic nerves carry only light sensations; auditory nerves carry only sensations for sound, etc.).

2. **Emil du Bois Reymond** (1818-1896) discovered that the firing of a nerve cell (neuron) is based on both a chemical reaction and an electrical impulse.

3. **Hermann von Helmholtz** (1821-1894), first used the muscle and nerves of frogs' legs and later, in studies of humans, discovered the speed of nerve impulses (about 100-200 mph in humans). He published his findings in 1850. He also contributed to the field of sensation and perception with his trichromatic theory of color vision (the Young-Helmholtz theory).

4. **Mapping the brain**—Several 19th-century discoveries and achievements, such as the blood-brain barrier discovered by Paul Ehrlich, foreshadowed the modern-day development of such techniques as positive emission tomography (PET) and functional magnetic resonance imaging (fMRI).

    a. The **Phineas Gage** accident (1848)—A blasting powder accident drove a large metal bar through railway worker Gage's skull, damaging his left frontal cortex. While Gage retained his cognitive abilities and his memory, he became profane, dishonest, and irritable. The changes in his behavior and personality shed light on the effects of injury

to specific brain areas.

b. French neurologist **Paul Broca** (1824-1880) found damage to a small area of the left frontal lobe in a patient with expressive aphasia (the patient could speak, but could not form coherent ideas in speech—he spoke nonsense). This small brain region became known as Broca's area.

c. **Carl Wernicke** (1848-1905), a German physician, made a discovery parallel to that of Broca in his study of patients who could speak but could not understand language. Wernicke found that these patients had damage in a small left-brain region near Broca's area; we now know this second region as Wernicke's area.

d. In 1876 the Scottish scientist **David Ferrier** (1843-1928) published a map of the monkey brain in which he identified the functions of a number of brain areas.

B. **Birth of the new science**

1. **Charles Darwin** (1809-1882) and his *On the Origin of Species* (1859) had, by the late 19th century, become an important influence on development of psychological science. Darwin's influence is apparent in the work of scientists interested in similarities and differences across people and between humans and nonhuman species. Darwin's ideas about the adaptive nature of behavior would be a force in shaping the views of future psychological scientists.

2. **Wilhelm Wundt** (1832-1920) established the first research laboratory in psychology at the University of Leipzig in Germany in 1879. His 180 doctoral students (33 of them Americans) included some of the most important leaders in the new field of psychological science. Wundt developed two approaches to psychology:

   a. *Voluntarism* emphasized the willful, voluntary actions of the mind, studied through experimental self-observation and interpretation of conscious experience.

   b. *Völkerpsychologie* (sociological psychology) was a forerunner of modern social or cultural psychology. We know Wundt better for his experimental work, but the *Völkerpsychologie*, published in 1904, was a huge multivolume work discussing language, customs, social behavior, and comparative and historical research methods.

3. **William James** (1842-1910) was America's first true psychologist and established a teaching laboratory at Harvard University in 1875, 4 years before Wundt's research lab. James's book *The Principles of Psychology* (1890) took 12 years to complete and has never gone out of print. Like the Germans, James considered psychology a natural science, but his interest in consciousness centered on the functions it served in individuals' lives. This notion influenced development of the American view known as **functionalism**. The word functional had two meanings in relation to this viewpoint:

    a. Consistent with the theory of evolution, consciousness and behavior serve adaptive functions in allowing individuals to adjust to changing environments.

    b. The functionalists were also interested in the relation between antecedents (causes) and outcomes (consequences) of behavior—a connection that today we call functional relations.

4. **Edward B. Titchener** (1867-1927) was one of Wundt's best-known students. Titchener was born in England. After studying in Germany, he went to Cornell University in the U.S., where he spent the rest of his career. Unlike James, Titchener was less interested in the functions of consciousness than its basic elements—its structure. This focus on the elements of consciousness, studied through highly trained research subjects using a form of self-observation (introspection), became known as **structuralism**.

5. **G. Stanley Hall** (1844-1924) established the first research laboratory in the U.S. (1883) at Johns Hopkins University and was the founding president of the American Psychological Association in 1892. He created the first American psychology journal (*American Journal of Psychology*) in 1887 and initiated the child study movement, intended to conduct research on children with the aim of improving education. Hall also convened the famous 1909 Clark University Conference, which was the occasion for Sigmund Freud's only visit to the U.S.

6. **Ivan Petrovich Pavlov** (1849-1936) was a Russian physician who in 1904 received a Nobel Prize for his work on digestion. His observations of salivation led Pavlov to his landmark work on the type of learning we now call classical conditioning.

7. American **John Broadus Watson** (1878-1958) believed that conditioning could account for human behavior and that environment—experience and training—was the most powerful behavioral influence. Dismissing the importance of consciousness and mind, he considered behavior the essential subject matter of psychology. Watson famously conducted research on the behavior of children (such as his "Little Albert" study with Rosalie Rayner on conditioned emotional reactions) and in 1913 published an article titled "Psychology as the Behaviorist Views It"—a presentation of behaviorism that became known as the "behaviorist manifesto"—and established Watson as the father of **behaviorism**.

8. **Sigmund Freud** (1856-1939), who spent most of his career in Vienna, Austria, took an approach to psychological science quite different from that of the Germans and Americans. His psychoanalytic theory achieved great popularity in the early 20th century and quickly spread in the U.S. after his 1909 visit. Unlike the behaviorists, Freud emphasized the role of unconscious forces and hypothetical structures (e.g., id, ego, superego) in his view of personality.

GO TO ACTIVITY 1.1
Activities From the Society for the History of Psychology Website

GO TO ACTIVITY 1.2
Facebook Activity

GO TO ACTIVITY 1.3
Psychology Goes to Madison Avenue

C. The role of nonhuman animals in development of psychological science

Many students find psychology attractive as a field of study or a career due to their interest in human service, as reflected in such specialties as clinical, school, or forensic psychology. However, it is important that

students understand the role of basic science, not only as a foundation for the many applications they may find appealing, but also as a source of fundamental knowledge about the world.

1. Nonhuman animal research has long contributed to psychological science. This research is significant not only for its potential practical applications, but also because the work of many psychological scientists extends our fundamental knowledge of the world in such areas as animal behavior, evolutionary psychology, and neuroscience. Examples of nonhuman animal research can be integrated in discussions of important developments in the various psychological perspectives.

2. Some key examples would include the role of animals in the study of nerve signal transmission (e.g., Helmholtz's frogs), cognitive maps (Tolman's rats), principles of behavior (Skinner's pigeons and rats), learning (Thorndike's cats), split-brain effects (Sperry's cats), and nonhuman language (Washoe the chimp).

3. Some of this work is important simply because it advances scientific knowledge, while much of the animal research has also led to an improved understanding of human behavior. Thus, students should understand the generality of many behavioral processes (e.g., reinforcement, nervous system function, cognition, perception) across species and the place of humans in the broader context of psychological science.

LESSON 2

Psychological Perspectives

Throughout the history of psychological science, psychologists have organized their ideas in a variety of ways, and the field continues to become increasingly specialized. However, today we recognize several broad viewpoints or perspectives from which psychological scientists survey the field and conduct their work. These perspectives are commonly identified as Behavioral, Behavioral Genetics, Cognitive, Evolutionary, Neuroscience, Psychodynamic, Humanistic-Existential, and Sociocultural.

I. The **behavioral perspective** emphasizes the centrality of observable behavior and the environmental events (e.g., stimuli, reinforcers) that influence it.

   A. This perspective has given rise to techniques for behavior change in a wide array of arenas, including education, behavior modification and therapy (in such areas as self-control and habit management, elimination of phobias), parent training, and organizational management and production.

   B. Much of contemporary behaviorism derives from the work of **B. F. Skinner** (1904-1990) and his pioneering work in operant conditioning.

II. The **behavioral genetics perspective** reflects the work of psychological scientists who study the combined effects of environment and genes on personal characteristics and differences.

   A. Areas of interest include the relative contributions of experience and genetics to mental disorders, personality characteristics, intelligence, and sexual orientation.

   B. Charles Darwin's cousin **Francis Galton** (1822-1911) was an early behavioral geneticist and father of the study of individual differences, as seen in such works as his *Hereditary Genius* (1869). Unfortunately, Galton's work also gave rise to the field of eugenics (the pseudoscientific view that the genetic makeup of the population can be improved by selective breeding and by preventing reproduction by people with various disabilities), which the Nazis adapted to their own aims in formulating the "final solution" in World War II.

III. The **cognitive perspective** is embraced by scientists interested in the mental processes that allow organisms to encode, store, and retrieve information.

A. This perspective encompasses such tasks as decision making, problem solving, reasoned thought, and memory.

B. Key figures in the development of the cognitive perspective include: **Edward C. Tolman** (1886-1959), who proposed the idea of cognitive maps and latent learning; **Jean Piaget** (1896-1980), who developed an important theory of cognitive development; and **Frederick C. Bartlett** (1886-1969), best known for the notion that we devise schemas as an aid to organize knowledge and experience.

IV. The **evolutionary perspective** is the purview of psychological scientists who study the role of natural selection in the evolution of psychological mechanisms that allow adaptation to recurring behavioral problems (e.g., mate selection, altruism, social competition) relevant to species survival.

Contemporary work in evolutionary psychology is reflected in the work of such scientists as Harvard psychologist **Steven Pinker** (1954-) in his *The Blank Slate* (2002) and **David Buss** (1953 -), of the University of Texas-Austin, best known for research on the evolutionary psychology of mate selection.

V. **Neuroscience** is the study of the relation among brain, body, and behavior, including such questions as the role of chemicals in transmission of neural messages, the connection between blood chemistry and emotion, and the role of the brain in sensation and perception.

A. Neuroscience moved forward in the work of **Charles Scott Sherrington** (1857-1952) and his explanation of the nature of the synapse, **Karl S. Lashley** (1890-1958) and his work on memory, and **Roger W. Sperry** (1913-1994) in his research on split-brain effects.

B. Notable contemporary neuroscientists include **David Hubel** (1926-2013) and **Torsten Wiesel** (1924-), Nobel Prize winners for their study of information processing in the visual system.

VI. The **psychodynamic perspective** sees behavior as the product of such influences as unconscious drives and conflicts, and personality traits as outcomes of such underlying causes as aggressive or sexual drives.

A. This perspective derives from the work of **Sigmund Freud**.

B. Other important individuals in the development of the psychodynamic perspective have included **Carl Gustav Jung** (1875-1961), **Alfred Adler** (1870-1937), **Erik Erikson** (1902-1994), and **Karen Horney** (1885-1952).

VII. The **humanistic-existential perspective** emphasizes an understanding of the healthy person and concerns about human potential, including meaning of life, self-concept, and self-actualization.

A. This perspective is associated with the hierarchy of needs developed by **Abraham Maslow** (1908-1970) and the client-centered therapy of **Carl Rogers** (1902-1987).

B. The existential backdrop for this perspective includes the work of such philosophers as **Soren Kierkegaard** (1813-1855) and **Jean-Paul Sartre** (1905-1980) and psychiatrist **Viktor Frankl** (1905-1997).

VIII. The **sociocultural perspective** is a viewpoint that examines the role of cultural context as an influence on behavior and mental processes. Cultural context includes factors such as race/ethnicity, culture, gender identity and expression, sexual orientation, disability, religion, socioeconomic status, national origin, and aging.

A. This perspective raises questions about the similarities and differences in people across cultural groups and contexts.

B. Pioneers in the study of culture and behavior included **W. H. R. Rivers** (1864-1922), **W. G. Sumner** (1840-1910), and psychology's founder **Wilhelm Wundt**. Modern cross-cultural researchers include **Walter J. Lonner** (1934-) and **David Matsumoto** (1959-).

GO TO ACTIVITY 2
Using Psychological Perspectives to Answer Questions on Behavior

LESSON 3

Subfields of Psychological Science and Practice

Psychologists conduct research and apply their knowledge across a wide range of specialty areas. It is within the context of these areas of specialization that the discipline makes significant contributions to the welfare of society and individuals. These contributions range from the treatment and enhanced quality of life of individuals with mental health needs to improvement of working conditions and efficiency in organizations and enhanced understanding of people in their family, community, and cultural contexts.

Students may be surprised to learn about the breadth of these applications of psychology in areas dedicated to the betterment of society; thus, you may find it helpful to highlight some of the less obvious of these applications. These might include such areas as psychology's contributions to understanding the effects of stress on health, the limitations of memory, the universality of personality traits, the variables influencing violence and discrimination, or the fundamental importance of psychological principles as a foundation for education and social behavior.

We can think of psychological subfields in two different ways: (a) the broad groups into which we can classify psychologists and (b) the specialized areas (subfields) that comprise the discipline of psychological science.

I. Classification of psychologists

A. **Practitioners** provide such services as therapy, psychological treatment, testing, advertising, polling, marketing, and consulting in a variety of settings: private practice, clinics, schools, hospitals, businesses, organizations, government agencies, courts, military organizations, and prisons, among others.

B. **Academics** are employed at colleges and universities. They are engaged primarily in teaching, research, and writing. Some academics conduct consulting, practice, or program administration.

C. **Researchers**

1. In addition to universities, researchers may also work in industry, business, and governmental organizations (e.g., National Institutes of Health, National Institute of Mental Health, military organizations)

2. Researchers in these types of settings may study a variety of psychological phenomena. Examples:

   a. Development of effective job-training procedures

   b. Research involving health-related behavior change (e.g., prevention of HIV, smoking, obesity)

   c. Assistance with jury selection

   d. For more examples, see http://www.apa.org/science/resources/careers/index.aspx

D. In a clinical setting, **psychologists** study both normal and abnormal functioning and treat patients with mental and emotional problems as well as behavioral features of all health care problems (e.g., smoking, addictions, obesity, chronic pain). They also study and encourage behaviors that build wellness and emotional resilience. Practicing psychologists have doctoral degrees. In contrast, **psychiatrists** are medical doctors who specialize in the diagnosis and treatment of mental health disorders. Both psychologists and psychiatrists use a variety of treatments to help patients. Psychotropic medication has historically been prescribed by physicians, but over the past decade, a handful of states have enacted laws that have allowed psychologists specially trained in psychopharmacology to prescribe psychotropic medication. Under approved legislation, qualified, licensed psychologists can obtain prescriptive authority to fill the need for access to comprehensive mental health care.

II. Subfields of psychological science

A. These subfields represent specialized areas that comprise the discipline of psychological science and are not intended to include all possible areas. These subfields are considered focal areas within the field that psychologists specialize in and identify themselves

by. This sampling is presented to give you an idea of the breadth of psychology's scholarship and applications.

1. **Clinical psychologists** foster psychological health, sometimes specializing in particular disorders.
2. **Cognitive and perceptual psychologists** study language, perception, memory, problem solving, and other thought processes.
3. **Community psychologists** deal with broader problems of mental health in social and community environments, often with a focus on prevention.
4. **Counseling psychologists** (those who perform psychotherapy) promote adjustment to life changes or transitions similarly to clinical psychology, but usually work with adjustment issues, rather than severe disorders.
5. **Developmental psychologists** study age-related changes in behavioral, biological, social, cognitive areas, often specializing in a particular group (e.g., infancy, early childhood, adolescence, adulthood).
6. **Educational psychologists** study the human learning process, often developing methods to improve teaching and testing.
7. **Engineering psychologists** apply psychological science to design of human–machine systems and technology.
8. **Environmental psychologists** work in interdisciplinary ways to study relations between people and their surroundings, whether natural, social, human-built, or technological.
9. **Evolutionary psychologists** investigate the relations of psychological characteristics to modern evolutionary theory.
10. **Experimental psychologists** have wide-ranging interests in scientific study of behavioral processes (e.g., learning, perception, memory, language) in both human and nonhuman subjects.
11. **Forensic psychologists** study relations between psychology and law and apply psychological principles in such areas as therapy and assessment within the legal community.
12. **Health psychologists** apply psychological science to promote good health and prevent disease.

13. **Industrial/organizational psychologists** study the relations between people and work environments in such areas as organizational behavior, personnel selection, and consumer behavior.

14. **Neuropsychologists** (and behavioral neuropsychologists) study relations between the brain and behavior in such areas as head injury, autism, or Alzheimer's disease.

15. **Quantitative and measurement psychologists** develop and apply the methods of research and statistics to a wide range of psychological phenomena and problems.

16. **Rehabilitation psychologists** help individuals regain functioning lost due to illness or accident, often working in medical settings.

17. **School psychologists** work with children in educational settings, often assessing and intervening in problems related to learning or adjustment in school.

18. **Social psychologists** investigate the nature of social interaction as it relates to such phenomena as attraction, attitudes, group behavior, prejudice, aggression, and leadership.

19. **Sport psychologists** study psychological processes affecting behavior of people in athletic settings.

This list of subfields of psychological science is from the APA brochure *Careers in Psychology,* available at http://www.apa.org/careers/resources/guides/careers.aspx. For more information on careers in psychology, please see the TOPSS unit lesson plan on vocational applications (expected publication date: late 2014).

B. It is important to realize, of course, that any classification of subfields is largely a convenient conceptual organizational scheme. In reality, many psychologists engage in practice or research that cuts across these subfields. For example, a psychologist interested in treating some disorders may use learning-based techniques (behavior modification or behavior therapy); or a psychological scientist studying attribution is likely to draw upon research from both cognitive and social psychology.

C. Further, numerous interdisciplinary subfields also exist (e.g., cognitive neuroscience, psycholinguistics, behavioral genetics, artificial intelligence, political psychology).

D. Students should realize that psychological science is a complex field with many specialties and subspecialties, and there is not a single simple definition of a psychologist or psychological scientist.

ACTIVITIES

ACTIVITY 1.1

Activities From the Society for the History of Psychology Website

Compiled by

Ken Keith, PhD
University of San Diego

BACK TO CONTENT OUTLINE

The Society for the History of Psychology (APA Division 26) has an excellent website of teaching resources: http://www.historyofpsych.org/teacher-studentresources/teaching.html. This site includes, among other resources, an excellent set of teaching activities assembled by Dr. Jim Goodwin, with a complete description of each activity and how Dr. Goodwin has used it in the classroom (as of early 2013, this was the first document listed under "Document Library;" posted directly at http://www.historyofpsych.org/images/Activities_HistoryofPsych_Goodwin.pdf). These activities provide good ideas for acquainting students with psychological perspectives and prominent psychologists, and most can be readily adapted for use in the high school classroom. The activities include:

1. The minilecture
2. The newspaper assignment
3. Annotated bibliography
4. The poster assignment(s)
5. Summarizing journal articles
6. The historiography scavenger hunt
7. The genealogy assignment
8. Identifying resource materials
9. Teaching about introspection
10. Slideshow contest
11. Becoming Darwin
12. Recognizing presentism
13. Comparing text editions
14. Tracking journal content
15. Toasting the greats
16. Creating a departmental history
17. Creative writing assignments
18. Hiring William James and speed dating
19. Incorporating historical context
20. The automatic sweetheart

Comments and suggestions on some of these activities:

1. The **hiring William James** activity involves evaluating William James as a job applicant. An effective variation on this activity is to have students, either individually or in pairs, prepare job applications for a number of famous psychologists.

- First, prepare a job ad that might be typical for your school inviting applications for the position of psychology teacher.
- Second, provide students a list of prominent psychologists. The list should include prominent psychological scientists, living or dead, and should represent a variety of perspectives.

- Third, ask each student (or pair) to prepare an application packet as if they were the psychologist whom they have chosen (or that you have assigned them). The application should include a brief résumé, including important publications and experience, a statement of research philosophy or expertise, and a statement of teaching philosophy.
- Fourth, after students have prepared their materials (probably a couple of class meetings after you have given the assignment), form small groups, ask them to discuss each of the "applicants" represented in their group and then to select the one applicant they consider the best for the job.
- Finally, ask the best applicant from each small group to make a brief presentation (in front of the whole class) of his or her experience and credentials. The class, serving as the selection committee, then will vote to choose the candidate whom they would like to hire for the job.

This is an activity that can generate much good discussion about the various points of view in psychological science as well as bring to life important figures in the field.

This activity aligns with the *National Standards for High School Psychology Curricula* Scientific Inquiry Domain, Content Standard 1: Development of psychology as an empirical science, Performance Standard 1.2: Describe the emergence of psychology as a scientific discipline.

2. The **newspaper assignment** activity is another way to bring to life people and perspectives and has the added advantage of helping students place important developments in psychology in the context of other significant events in the world. Again, variations are possible from the specific procedure described by Goodwin. For example:

- First, ask students, individually or in small groups, to choose an important contribution, event, publication, or phenomenon (contemporary or historical) in psychological science.
- Second, ask the students to identify the psychological scientist(s) identified with the contribution or event they have chosen and the year of its occurrence.
- Third, ask the students to create a newspaper reporting their identified event in as much detail as they can. In addition, the newspaper should include reports of other important happenings from the same year—perhaps wars, political conventions, major business events, national disasters, or anything else that made news in the selected year. You can encourage students to use not only available reference material, but also other science teachers, history teachers, parents, or others, as possible sources of ideas.

- Fourth, arrange for display and discussion of the newspapers. Some students may use sophisticated software, and others may use their artistic talents to produce posters or other formats. You may choose to have a day for students to move about the room to view all the posters, or you might post them in a school hallway for class members or other students and teachers to see.

This activity aligns with the *National Standards for High School Psychology Curricula* Scientific Inquiry Domain, Content Standard 2: Major subfields within psychology, Performance Standard 1.2: Describe the emergence of psychology as a scientific discipline.

3. The **slideshow contest** also allows for any number of interesting variations. The basic format here requires forming teams (two, four, or whatever class size and dynamics allow) for a game show-type contest. This activity is useful for a review or as a check on reading assignments.

- First, prepare PowerPoint slides visually depicting the relevant material (people, perspectives, laboratory photos, diagrams of learning models, etc.) that you wish to teach/review.
- Second, prepare a question to accompany each visual (e.g., "Which type of conditioning does this diagram illustrate?" "Who is this developmental theorist?" "What process does the graph illustrate?" etc.).
- Third, organize the groups (e.g., one on each side of the room).
- Fourth, present the slides one at a time, either: (a) allowing members of both (all) groups to shout out the answers, awarding points to the first group answering correctly; or (b) directing each question to a particular group, awarding points if they answer correctly, and giving another group a chance to answer if the first group cannot.

This activity aligns with the *National Standards for High School Psychology Curricula* Scientific Inquiry Domain, Content Standard 1: Development of psychology as an empirical science, Performance Standard 1.2: Describe the emergence of psychology as a scientific discipline.

ACTIVITY 1.2

Facebook Activity

Developed by

Jenn Schlechtweg
Ridgefield High School, CT

This activity aligns with the *National Standards for High School Psychology Curricula* Scientific Inquiry Domain, Content Standard 1: Development of psychology as an empirical science, Performance Standard 1.2: Describe the emergence of psychology as a scientific discipline.

Background

Facebook is a free social networking website that is unique to your generation. According to Wikipedia (another product of your generation), "users can join networks organized by city, workplace, school, and region to connect and interact with other people. People can also add friends and send them messages, and update their personal profiles to notify friends about themselves." **What would it have been like if some of the most famous psychologists in history had a Facebook page?**

BACK TO CONTENT OUTLINE

Task

1. You will be assigned one psychologist from the history unit.
2. You will make a hardcopy of a Facebook page for that psychologist! (Large paper will be handed out; you will probably need to manually cut and paste images/text onto the paper.)
3. You will also complete preparation work so you will be able to critique other psychologists on their "wall." Wall writing will occur during class.
4. Follow the directions below and get started!

STEP I: Assignment

Directions: Please circle the major historical figure you were assigned.

Rene Descartes	John Locke	Wilhelm Wundt
Max Wertheimer	G. Stanley Hall	Francis Cecil Sumner
Edward B. Titchener	Charles Darwin	William James
Margaret Floy Washburn	Mary Whiton Calkins	Sigmund Freud
Dorthea Dix	Ivan Pavlov	John B. Watson
B.F. Skinner	Abraham Maslow	Carl Rogers
Paul Broca	Carl Wernicke	Jean Piaget
Roger Sperry		

STEP II: What should be on my page?

1. Profile picture
2. General information
    a. Name, location, date of birth, date of death
    b. Education history
    c. Work history
    d. “About Me” section: Two paragraphs describing who this person is and an explanation of their most significant contributions to the field of psychology. Underline and define all key vocabulary terms.
3. Network (two networks)
    a. In which historical or modern theoretical approach does this person’s work most closely fit (e.g., structuralism, functionalism, behaviorism, gestalt, psychoanalytic, humanistic, evolutionary, biological, cognitive, biopsychosocial)?
    b. Explain why this person’s work falls into this approach.

4. Groups

Make up AT LEAST THREE groups that your psychologist would join.

a. Write one group message to your members consisting of a short explanation of what the groups are and what the title means.

b. Be sure to specifically connect the group to the historical figure and the figure's work.

5. Status Update

Create a clever status update describing what the historical figure would most likely be doing at any given time.

6. Check-in

a. Choose a minimum of two.

b. What places (restaurants, stores, buildings, etc.) would the historical figure have checked into? Include a picture, who they were with, and what they were doing. Be sure to specifically connect your choices to the historical figure and their work.

7. Friends

a. Include a minimum of six historical friends.

b. Be sure they have a good reason to be friends. They could have attended the same university or have views from similar psychological perspectives. Include one sentence explaining why they are friends.

8. You decide!

Add one more Facebook element for your psychologist that is not a requirement.

a. Example: Include a picture or graph related to their research.

b. Include an explanation of what the element is and how it relates to your historical figure.

STEP III: Class preparation work

Directions: After you have finished creating your Facebook page, complete the following preparation work for class.

Preparation work: This is due on the same days as profiles.

Identify the key concepts and ideas present in the theories of the following historical figures and then critique or support each theory based on your assigned figure's perspective. Be sure to include what your figure's theoretical approach is and describe it with reference to that figure.

- Mary Whiton Calkins
- Charles Darwin
- Dorthea Dix
- Sigmund Freud
- G. Stanley Hall
- William James
- Ivan Pavlov
- Jean Piaget
- Carl Rogers
- B. F. Skinner
- Margaret Floy Washburn
- John B. Watson
- Wilhelm Wundt
- Paul Broca

Discussion

Step I: Writing on walls

- Write on three people's walls. The wall posts must be on the pages of three different historical figures whose theoretical perspectives are different from the historical figure you used to create the Facebook page.
- What should you write? Using your preparation work and from the perspective of the historical figure you are representing, either critique or support each of the three historical figures' theory. You NEED to stay in the perspective of your historical figure.

Step II: Group work

Students will be placed into small groups to complete the following:

- Read through the wall posts and decide if they are accurate or not. Keep a list describing your comments and discussion.
- Look at each other's pages and choose the two most creative/clever elements out of the group (this could be pictures, status updates, etc.) and describe why your group decided on the elements.
- Come to a group consensus on which historical figure you find most interesting and why.

Step III: Class roundtable discussion

Students will participate in a whole group discussion based on the various posts and group work discussions.

Note: As an alternative exercise, teachers may want to have students create Facebook pages for these psychologists. Templates for creating free Facebook pages can be found online, through such websites as www.freetech4teachers.com.

Facebook Activity Rubric:

	Exemplary	Accomplished	Developing	Emerging	Points
Sections 1–3: Picture, General Information, Network	All requirements are met. The "General Information" section is descriptive and complete. All information is accurate. (15 pts.)	All requirements are met. The "General Information" section is complete. All information is accurate. (10 pts.)	Most of the requirements are met OR the "General Information" section is not complete OR some information is inaccurate. (5 pts.)	Some requirements are missing OR most information is inaccurate. (0-4 pts.)	(15)
Sections 4–5: Groups, Status Update	All requirements are met, and end product exceeds minimum expectations. Group names are insightful. Messages are complete and detailed enough where the group name would make sense. Status update demonstrates understanding. (15 pts.)	All requirements are met. Group names are representative of the theorist. Messages are complete. Status update demonstrates basic knowledge. (10 pts.)	Most of the requirements are met. Group names are representative of the theorist. Messages are complete. Status update demonstrates basic knowledge. (5 pts.)	Some requirements are missing. Most information is elementary or inaccurate. (0-4 pts.)	(15)
Section 6: Check-In	All requirements are met, and end product exceeds minimum expectations. Check-ins are insightful. All elements are complete, detailed and demonstrate understanding. (15 pts.)	All requirements are met. Check-ins connect to historical figure correctly. All elements are complete and demonstrate understanding. (10 pts.)	Most requirements are met. Some information is inaccurate. (5 pts.)	Some requirements are not met. Information is mostly inaccurate. (0-4 pts.)	(15)

BACK TO CONTENTS

Section 7: Friends	All requirements are met. Connections between your assigned historical figure and the friends chosen provide insight and understanding into your historical figure's life and work. (15 pts.)	All requirements are met. Connections between your assigned historical figure and the friends chosen provide basic understanding of your historical figure's life and work. (10 pts.)	Most requirements are met. Connections between your assigned historical figure and the friends chosen provide basic understanding of your historical figure's life and work. (5 pts.)	Some requirements are not met. Information is inaccurate. (0-4 pts.)	(15)
Section 8: You Decide!	Your chosen element is creative and provides insight and understanding into your psychologist's life and work. (15 pts.)	Your chosen element provides understanding of your psychologist's life and work. (10 pts.)	Your chosen element is somewhat beneficial in the task to understanding your psychologist and his/her theory. (5 pts.)	Your chosen element is not beneficial to understanding your psychologist and his/her theory. (0-4 pts.)	(15)
Preparation Work	All requirements are met. Theoretical approaches of all historical figures are identified and applied thoroughly. Compare and contrast between your historical figure and the other figures is complete and insightful. Your work demonstrates deep understanding. (25 pts.)	All requirements are met. Theoretical approaches of all historical figures are identified and applied thoroughly. Compare and contrast between your historical figure and the other figures is complete and insightful. (20 pts.)	Most requirements are met. Some information is inaccurate. (15 pts.)	Some requirements are not met. Information is mostly inaccurate. (0-10 pts.)	(25)

ACTIVITY 1.3

Psychology Goes to Madison Avenue

Developed by

Steve Jones
City of Medicine Academy, NC

This activity aligns with the *National Standards for High School Psychology Curricula* Scientific Inquiry Domain, Content Standard 2: Major subfields within psychology, Performance Standard 1.2: Describe the emergence of psychology as a scientific discipline.

Give students the following instructions:

Imagine you are a famous figure in the field of psychological science and that, in addition to teaching and conducting your research, you have decided to open a business based on your work. Your job is to choose one of the following psychologists, do research to learn more about his/her contributions to psychology, and then create a business that illustrates the psychologist's perspective.

BACK TO CONTENT OUTLINE

For example, if you were to choose B. F. Skinner, you might create a business emphasizing his work with animals in creating his form of behaviorism, based on operant conditioning. You might define the business like this:

Skinner's Pet Peeves

We offer training for animals using positive reinforcement.

Specializing in rats and pigeons

Psychologists you could choose from:

Ivan Pavlov	John B. Watson	Sigmund Freud
Carl Rogers	Abraham Maslow	Jean Piaget
Carl Jung	Erik Erikson	Albert Bandura
Stanley Milgram	Solomon Asch	Philip Zimbardo

In addition to the business name, you will need to create:

- a business logo
- an advertisement (TV, online, radio, or print)
- a pamphlet that touts what your business offers (please include any specific psychological terminology as relevant)

ACTIVITY 2

Using Psychological Perspectives to Answer Questions on Behavior

This activity aligns with the *National Standards for High School Psychology Curricula* Scientific Inquiry Domain, Content Standard 1: Development of psychology as an empirical science, Performance Standard: 1.3 Describe perspectives employed to understand behavior and mental processes.

This activity encourages discussion of the various psychological perspectives and the views they bring to bear upon questions about behavior. For each of the following statements, ask students to indicate with which psychological perspective they would be most likely to agree: Psychodynamic (P), Behavioral (B), Behavior Genetics (BG), Evolutionary (E), Cognitive (C), Sociocultural (S), Neuroscience (N), or Humanistic-Existential (HE). Although each of the statements is keyed to one of these perspectives, it is important to realize that events in the real world are often complex, and students may be able to make good arguments for more than a single perspective in some cases. And of course these statements are only examples; you (or your students) could easily generate additional statements to contribute to the discussion.

BACK TO CONTENT OUTLINE

The statements:

- The mind can be viewed as an information processing system.
- Behavior is motivated by forces that individuals may not understand or be aware of.
- Human thought and behavior can be understood in terms of activity at the neural level.
- One limitation of our understanding of behavior is that most research has been conducted on subjects from North America.
- Psychological science is the study of behavior that is observable and measurable.
- Personality is attributable more to genes than to environmental experience.
- Many of our behaviors have developed as a result of our species' adaptation to the challenges of surviving across millennia.
- Future behavior is influenced by memory and analysis of past experience.
- Pain tolerance is largely a result of the effects of endorphins and other neurochemicals.
- Pain tolerance is influenced by expectancies and interpretation of experiences.
- Behavior is powerfully influenced by its consequences, in the form of reinforcement and punishment.
- Behavior may be the product of unconscious conflict and anxiety.
- Basic facial expressions of emotion are universal across many cultures.
- Identical twins tend to have similar levels of intelligence, even when separated early in life.
- Women around the world tend to choose older mates who will be good providers.
- Behavior is motivated by self-actualization and the promise of human potential.

Answer key:

- The mind can be viewed as an information processing system. [C]
- Behavior is motivated by forces that individuals may not understand or be aware of. [P]
- Human thought and behavior can be understood in terms of activity at the neural level. [N]
- One limitation of our understanding of behavior is that most research has been conducted on subjects from North America. [S]
- Psychological science is the study of behavior that is observable and measurable. [B]
- Personality is attributable more to genes than to environmental experience. [BG]
- Many of our behaviors have developed as a result of our species' adaptation to the challenges of surviving across millennia. [E]
- Future behavior is influenced by memory and analysis of past experience. [C]
- Pain tolerance is largely a result of the effects of endorphins and other neurochemicals. [N]
- Pain tolerance is influenced by expectancies and interpretation of experiences. [C]
- Behavior is powerfully influenced by its consequences, in the form of reinforcement and punishment. [B]
- Behavior may be the product of unconscious conflict and anxiety. [P]
- Basic facial expressions of emotion are universal across many cultures. [E]
- Identical twins tend to have similar levels of intelligence, even when separated early in life. [BG]
- Women around the world tend to choose older mates who will be good providers. [E]
- Behavior is motivated by self-actualization and the promise of human potential. [HE]

This activity was modeled after an activity titled *The Three Faces of Psychology* (Gruber, 2007):

Gruber, C. W. (2007). Three faces of psychology. In *Instructor's manual for Zimbardo, Johnson, Weber, and Gruber Psychology, AP Edition* (pp. 329-333). Upper Saddle River, NJ: Pearson.

Another activity, similar to this one but with a slightly different approach to psychological perspectives, is available at the following site: http://highered.mcgraw-hill.com/sites/0073382736/student_view0/perspectives_in_psychology/five_perspectives_in_psych__/

CRITICAL THINKING AND DISCUSSION QUESTIONS

CRITICAL THINKING AND DISCUSSION QUESTIONS

1. For each of the following scenarios, explain the behavior of the individual utilizing the approaches indicated.

    a. Jebediah, while walking to psychology class, is surprised by a giant snake and shrieks and jumps backward in surprise and horror. His heart is racing and his palms are sweating. Explain his behavior from both the behavioral and evolutionary approaches.

    b. Lars is a foreign exchange student from Sweden who comes to the United States to live with a host family in Wisconsin. Lars confides to his host family that he is having a hard time adjusting to the more relaxed attitude students in the U.S. have when speaking with their teachers. Lars also admits that it's hard to remember the names of all of his classmates and instructors. Explain his behavior from both the cognitive and sociocultural approaches.

2. Describe the differences between psychologists and psychiatrists.

3. Describe the commonalities of psychology and other scientific disciplines, including biology, chemistry, and physics.

4. Looking back on the history of psychology in the late 19th century, what evidence can be found to support the conclusion that the discipline began as a science?

5. Which of the perspectives are least scientific and which are the most scientific in your opinion?

6. Imagine you have been severely depressed for several weeks. Would you rather have a psychologist treat your depression using the biological approach or the cognitive approach? Be sure to explain your answer.

7. Marcus really wants to ask Amy for a date but begins to sweat uncontrollably and finds it hard to speak every time he even gets near her. Choose any three psychological approaches and describe how each might explain Marcus's behavior.

8. Explain how marriage, which is common in vastly different cultures, would be explained from the viewpoint of an evolutionary psychologist.

9. Why might it be difficult to explain human behavior using only one perspective?

RESOURCES, REFERENCES, AND RECOMMENDED READING

RESOURCES

Websites

APA Online Career Center

http://psyccareers.apa.org/

APA's Online Career Center is the industry's premier resource for connecting top-quality candidates with jobs in a variety of psychology disciplines.

APA *Careers in Psychology* Brochure

http://www.apa.org/careers/resources/guides/careers.aspx?item=1

This brochure includes sections on what psychology is, subfields in psychology, the job outlook, what psychologists do and where they do it, getting ready to work in psychology, and APA resources for students.

APA Divisions

http://www.apa.org/about/division/index.aspx

The 54 APA Divisions demonstrate the breadth of the field.

APA Interesting Careers in Psychological Science

http://www.apa.org/science/resources/careers/index.aspx

This collection of essays was written by doctoral-level psychological scientists who have pursued a variety of career paths.

Approaches in Practice

http://www.learner.org/discoveringpsychology/therapeutic/index.html

Approaches in Practice explores the contemporary approaches used to understand, treat, and prevent psychological disorders.

Center for the History of Psychology

http://www.uakron.edu/chp/

The Center for the History of Psychology provides access to and interprets the historical record of psychology and related human sciences.

Classics in the History of Psychology

http://psychclassics.yorku.ca/

Classics in the History of Psychology makes full texts of a large number of historically significant public domain documents from the scholarly literature of psychology and allied disciplines available online.

The History of Psychology

http://www.learner.org/discoveringpsychology/history/index.html

This website lets you explore some of the key events, publications, and perspectives that have shaped psychology.

History of Psychology

http://libguides.slu.edu/psych_history

History of Psychology is an activity in which one explores some of the key events, publications, and perspectives that have shaped psychology from the late 19th century to the present. As of late 2013, the activity was in the process of being updated and revised, and existing locations, including links, may be changing.

Society for the Teaching of Psychology (APA Division 2)

OTRP Teaching of Psychology Idea Exchange (ToPIX)

http://topix.teachpsych.org/w/page/19980993/FrontPage

ToPIX is a product of the Office of Teaching Resources in Psychology, part of the Society for the Teaching of Psychology of the American Psychological Association. ToPIX is a forum where ideas on teaching psychology can be exchanged.

Today in the History of Psychology

http://www.cwu.edu/~warren/today.html

The American Psychological Association historical database is a collection of dates and brief descriptions of over 3100 events in the history of psychology.

Top 10 Psychology Career Trends

http://psychology.about.com/od/careersinpsychology/tp/psychology-career-trends.htm

Top 10 Psychology Career Trends provides 10 of the fastest growing psychology jobs in the market.

The following websites show examples of the kinds of laboratory equipment and instruments that helped earlier psychological scientists conduct the research leading to modern psychological perspectives.

Museum of the History of Psychological Instrumentation

http://tomperera.com/psychology_museum/museum.htm

This museum is dedicated to the preservation of historical psychological lore and instrumentation. It consists of an online virtual museum with downloadable illustrations showing collections of early psychological laboratory research apparatus.

The Barnard College Psychology Department History of Psychology Collection:

https://psychology.barnard.edu/museum/vision

This collection is dedicated to the preservation of the history and apparatus from the early days of the Barnard College Department of Psychology.

Museum of Brass Instrument Psychology at the University of Toronto

http://www.psych.utoronto.ca/museum/

The instruments displayed in this exhibition represent the earliest research and teaching program in experimental psychology in Canada. They are witnesses to a period in the history of philosophy and psychology when scientists started measuring, describing, and investigating the contents of our sensations and thoughts.

Videos

Annenberg Learner. (Producer). (2001). *Discovering psychology.* [Video/DVD]. Available free from http://learner.org/resources/series138.html

Green, C. D. (Producer/Writer/Director). (2005). *Toward a school of their own: The prehistory of American functionalist psychology (Part 1)*. [Video documentary]. Available from http://shelf3d.com/oAZ-Q35-fOI#

Green, C. D. (Producer/Writer/Director). (2005). *Toward a school of their own: The prehistory of American functionalist psychology (Part 2)*. [Video documentary]. Available from http://shelf3d.com/q7sIc8RXspk#

References and Recommended Reading

Benjafield, J. G. (2010). *A history of psychology* (3rd ed.). Oxford, UK: Oxford University Press.

Benjamin, L. T., Jr. (2007). *A brief history of modern psychology*. Malden, MA: Blackwell.

Benjamin, L. T., Jr. (2008). *Favorite activities for the teaching of psychology*. Washington, DC: American Psychological Association.

Benjamin, L. T., Jr. (1991). *Harry Kirke Wolfe: Pioneer in psychology*. Lincoln, NE: University of Nebraska Press.

Benjamin, L. T., Jr. (2006). *A history of psychology in letters* (2nd ed.). Malden, MA: Blackwell.

Buss, D. M. (2008). *Evolutionary psychology: The new science of the mind* (3rd ed.). Boston, MA: Allyn & Bacon.

College Board (n.d.). *AP Psychology course home page*. Retrieved February 23, 2013, from: http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2265.html

Dunn, D., & Chew, S. L. (2005). *Best practices for teaching introduction to psychology*. Mahwah, NJ: Erlbaum.

Ebbinghaus, H. (1908). *Psychology: An elementary textbook*. Boston, MA: Heath.

Guthrie, R. V. (1998). *Even the rat was white: A historical view of psychology* (2nd ed.). Boston: Allyn & Bacon.

Hock, R. R. (2013). *Forty studies that changed psychology: Explorations into the history of psychological research* (7th ed.). Upper Saddle River, NJ: Pearson.

Hunt, M. (2007). *The story of psychology* (rev. ed.). New York: Anchor Books.

Keith, K. D. (Ed.). (2013). *The encyclopedia of cross-cultural psychology* (Vols. 1, 2, 3). Chichester, UK: Wiley-Blackwell.

Keith, K. D. (2012). *Student handbook to psychology: Vol. 1. History, perspectives, and applications.* New York, NY: Facts on File.

Kuther, T. L., & Morgan, R. D. (2013). *Careers in psychology: Opportunities in a changing world* (4th ed.). Belmont, CA: Wadsworth.

Landrum, R. E., & Davis, S. F. (2009). *The psychology major: Career options and strategies for success* (4th ed.). Upper Saddle River, NJ: Pearson.

Masumoto, D. (2009). *The Cambridge dictionary of psychology*. Cambridge, UK: Cambridge University Press.

Pickren, W. E., & Rutherford, A. (2010). *A history of modern psychology in context*. Hoboken, NJ: Wiley.

Scarborough, E., & Furomoto, L. (1987). *Untold lives: The first generation of American women psychologists*. New York, NY: Columbia University Press.

Sternberg, R. (2006). *Career paths in psychology: Where your degree can take you* (2nd ed.). Washington, DC: American Psychological Association.

Zwolinski, J. (2010). Careers in psychology. In D. G. Myers, *Psychology* (9th ed.; pp. A1-A11). New York, NY: Worth Publishers.

APPENDIX

ADDITIONAL KEY HISTORICAL FIGURES FOR UNIT LESSON PLAN

A. **Alfred Binet** (1857–1911)—French developer of the first intelligence test—the test that later, after translation and revision in the hands of Lewis Terman (1877–1956), became the Stanford-Binet Intelligence Test. Binet and his research assistant Theodore Simon developed the test to aid placement of students with intellectual difficulties in the schools of Paris.

B. **Harry Kirke Wolfe** (1858–1918)—Wundt's second American student (after Cattell) and founder of one of the earliest psychology labs in the U.S., at the University of Nebraska. One of the great early teachers of psychology; several of his students at Nebraska went on to become presidents of the APA (e.g., Edwin Ray Guthrie, Madison Bentley).

C. **James McKeen Cattell** (1860–1944)—Coined the term "mental test," and created early intelligence tests. As owner and editor of the journal *Science* for 50 years, he provided psychological science an important voice among the older sciences. Cattell was the first American to earn the PhD in Wundt's lab.

D. **Mary Whiton Calkins** (1863–1930)—First female president of APA (1905); studied with James at a time when Harvard offered admission and degrees only to men. Refused to accept the PhD from Radcliffe College (women's college associated with Harvard) because she had not studied at Radcliffe.

E. **Lightner Wittmer** (1867–1956)—Established the world's first psychology clinic (1896) and is generally considered founder of clinical psychology and school psychology. Gave impetus to development of applied psychology.

F. **Margaret Floy Washburn** (1871–1939)—First woman to receive a PhD in psychology (1894). She studied at Cornell University, where she was Titchener's first doctoral student, after moving from Columbia, where she had studied with Cattell; Columbia, like Harvard, did not grant degrees to women. Washburn was also an important contributor to an understanding of animal behavior.

G. **Lillian Moller Gilbreth** (1878–1972)—The first individual to earn a doctoral degree in industrial psychology and a pioneer in such areas as time and motion studies. Inventor of numerous devices useful to people with disabilities and a variety of household appliances, including the foot pedal trashcan opener, electric mixer, and storage shelves on the inside of refrigerator doors.

H. **Leta Stetter Hollingworth** (1886–1939)—An early activist on behalf of clinical psychology, an important pioneer in the study of sex differences, and the "mother" of the study of gifted children.

I. **Francis Cecil Sumner** (1895–1954)—First African American to earn the PhD in psychology (1920, Clark University). Established an important psychology program at Howard University, eventually sending many African American students on to PhD programs in psychology.

J. **Carl Rogers** (1902–1987)—Rejected Freud's emphasis on unconscious and Skinner's behaviorism to establish a so-called third force (humanistic psychology; Third Force because it was an alternative to the major forces of behaviorism and psychoanalysis). His humanistic psychology emphasized self-actualization, with a focus on individual phenomenological experience of the world. Gave us such notions as self-concept.

K. **Alan Turing** (1912–1954). Proposed in 1936 that it should be possible for a machine to perform any kind of computation. He provided the starting point for development of digital computer programs.

L. **Kenneth B. Clark** (1914–2005) and **Mamie Phipps Clark** (1917-1983)—Conducted research on racial identity and self-esteem and presented their findings in the *Brown v. Board of Education* case that struck down school segregation in the U.S. It was the first time the U.S. Supreme Court accepted findings of psychological science as evidence.

Copyright © 2014 American Psychological Association.